

## **REMARKS**

Claims 1-20 are pending in this patent application. Claims 8-20 have been previously withdrawn from consideration. By this amendment, claims 8-20 have been canceled, and claims 21-30 have been added. Reconsideration of this patent application, as amended, is respectfully requested.

### **Claims 8-20**

Claims 8-20 have been canceled.

### **Amendment to Specification**

The specification has been amended to update the cross reference data in accord with the Examiner's suggestion, as well as, to correct a minor numbering inconsistency. A version with markings showing changes made to the specification is included herewith as "Attachment".

### **35 U.S.C. § 103 Rejection (Dunn/Trail)**

Claims 1-7 were rejected under 35 U.S.C. § 103 as being unpatentable over Dunn et al. (U.S. Patent No. 4,759,350) in view of Trail (EP 0 845 250). Reconsideration of claims 1-7 is respectfully requested.

### **Dunn Does Not Teach Use of its Device to Shape a Humerus**

While Dunn discloses a device for shaping a distal femur and proximal tibia (i.e. the bones of a knee joint), Dunn never teaches that its device is to be

used to shape a humerus. Indeed, none of the text passages or figures set forth in the December 18, 2002 Office Action that purport to identify teachings of the use of Dunn's shaping device with a humerus, in fact, does so. For example, the surgical instrument 41 is never taught to be advanced into a medullary canal of the *humerus* as alleged in the December 18, 2002 at page 3, lines 2-6.

Trail Would Not Require Resecting the Greater Tubercle from the Humerus

It was alleged in the December 18, 2002 Office Action at page 4, lines 3-5 that "Trail teaches a shoulder replacement device where the structure, would require resecting the greater tubercle from the humerus during the shoulder replacement procedure." However, this is incorrect. Firstly, Trail never teaches that resecting the greater tubercle from the humerus is required due to its structure or otherwise. Secondly, one skilled in the art would be deterred from doing this since the insertion points for certain of the muscles which form the rotator cuff are located on the greater tubercle 40. Note that the rotator cuff, when functionally intact, stabilizes the humeral head in the glenoid fossa of the scapula during abduction of the arm thereby allowing the humeral head (or implanted prosthetic head component) to translate only a short distance in the superior direction (e.g. a few millimeters) during abduction of the patient's arm. Hence, when functionally intact, the rotator cuff prevents articulation (i.e. bearing contact) between the proximal portion of the humerus (or implanted prosthetic head component) and the patient's acromion 40 thereby avoiding painful bone-to-bone contact between the patient's acromion 36 and the patient's greater

tubercle 40. (See, e.g., Figs. 4-5 of Applicant's patent specification.) As a result, a surgeon would be clinically motivated to leave the greater tubercle 40 intact (including all muscle insertions associated therewith) to avoid this painful contact. (See Applicant's specification for a more detailed discussion relating to this point.)

### Conclusion

It is axiomatic that obviousness cannot be established by combining/modifying the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination/modification. Neither Dunn nor Trail (nor any other cited reference) provides any teaching, suggestion or incentive that supports the proposed combination/modification. Consequently, a prima facie case of obviousness under 35 U.S.C. § 103 has not been established with regard to Applicant's invention of claim 1.

### Discussion Re: Patentability of Claims 2-7

Each of claims 2-7 depends directly or indirectly from claim 1. As a result, each of claims 2-7 is allowable for, at least, the reasons hereinbefore discussed with regard to claim 1. Moreover, each of claims 2-7 recites additional novel and nonobvious limitations. For example, claim 3 recites the further limitations that:

said surgical instrument includes an intramedullary broach having a superior face, and  
said step of securing said tool guide member to said proximal end portion of said surgical instrument includes the step of securing said tool guide member to said superior face of said intramedullary broach.

Neither Dunn nor Trail provides any teaching of securing a tool guide to a broach, much less, a superior face of a broach. As a result, claim 3 is further allowable over the cited art.

#### **Newly Added Claims 21-30**

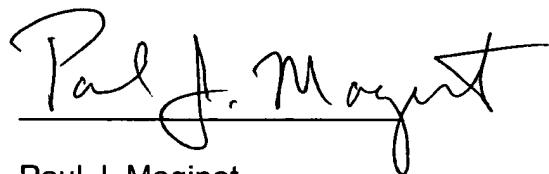
Claims 21-30 have been added. Such claims recite novel and nonobvious limitations. Accordingly, claims 21-30 are believed to be allowable over the prior art.

#### **Conclusion**

In view of the foregoing amendments and remarks, it is submitted that this application is in condition for allowance. Action to that end is hereby solicited.

Respectfully submitted,

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A handwritten signature in black ink, reading "Paul J. Maginot", written over a horizontal line.

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## **Attachment**

### **Version With Markings to Show Changes Made to Specification**

#### In the Specification

On page 1, line 6, please delete "Serial No. \_\_\_\_/\_\_\_\_\_" (Attorney Docket No. 1671-0115)", and insert the following in its place --Serial No. 09/767,473--.

On page 20, line 1, please delete "74", and insert --18-- in its place.

On page 20, line 1, please delete "68", and insert --12 of the prosthesis 10-- in its place.

On page 20, line 2, please delete "68", and insert --12-- in its place.